

## **INFLUENCE OF SCHOOL FACILITIES ON PUPILS' PERFORMANCE IN KENYA CERTIFICATE OF PRIMARY EDUCATION**

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### **ABSTRACT**

This paper discusses the influence of school facilities on pupils' performance in KCPE. The objectives were: to determine the extent to which headteachers provide school facilities and to establish the extent to which school facilities influence pupils' performance in KCPE. Descriptive research design was adopted. Three districts from Nairobi County were selected by simple random sampling. The schools selected were 14 from the first and second districts and 13 from the third district through simple random sampling. The 41 senior teachers and 41 accounts' clerks were selected by census. The research instruments used were the senior teachers' questionnaire, interview and document guides. Validation of the questionnaire instrument was by expert judgment review by the supervisors from the Department of Educational Administration and Planning of the University of Nairobi. The reliability coefficient of the research instruments was determined by split-half technique method, and was found to be 0.88 for the senior teachers' questionnaire and 1 for the interview and document guides. Descriptive statistics were used to analyze the data which was presented in tables. The findings were: all the 41 schools had fairly adequate exercise books, buildings and furniture. They had inadequate textbooks, radios, computers, equipment, displays, charts and play grounds. The schools with very adequate school facilities had the highest mean grades in KCPE. Therefore, school facilities influenced positively the pupils' performance in KCPE. Recommendations: Ministry of Education should provide adequate funds for textbooks, exercise books and chalks. Kenya Education Management Institute should develop a curriculum on management of school facilities for head teachers

**KEYWORDS:** Facility, Nairobi County, Performance and Primary Schools, Kenya

### **INTRODUCTION**

#### **Background to the study**

School facilities contribute to the academic achievement of pupils. The school facilities can be categorized into three: buildings and furniture; teaching and learning materials and play grounds. Both teachers and pupils need school facilities to research, read, write, confer, interact, view, listen, think, experiment and record. Teachers need buildings and furniture for conference rooms for team panning, diagnosis of pupils needs, and prepare instructional presentation. Pupils need classrooms, science laboratories and libraries for teaching and learning process. Also, pupils need play grounds to transact their affairs or to gather for social purposes (Asiabaka, 2008)

The year 2003 saw the reintroduction of Free Primary Education across the co On 6<sup>th</sup> January 2003, the ruling party, National Rainbow Coalition, Government of Kenya, reintroduced the Free Primary Education programme with the

aim of providing more opportunities to the disadvantaged school age children (age 3-16 years. However, anybody who wished to go to primary school was eligible to do so). The main aim of Free Primary Education in Kenya was an overall policy goal for primary education to act as a transition to achieving Education For All by the year 2015 (Republic of Kenya, 2003)

The programme created a positive outcome because it resulted in significant increase in enrolment in a majority of the schools (Otach, 2008). However, serious challenges have faced the implementation of the Free Primary Education policy (UNICEF & World Bank, 2009; Ministry of Education, 2007). They include congested classes (teacher to pupil ratio of 1:70 from 1:40) in some schools, shortage of supplementary reading books and school facilities (textbook to pupil ratio of 1:5) has affected pupils' accessibility to books while at home (Okwach & George, 1997). Expanding the availability of school facilities is clearly a first step towards Universal Primary Education. India's rapid progress toward universal access to primary education has been aided by expansion in the number of schools. Between 1950 and 2002, the number of primary schools in India increased threefold as the number of upper primary schools by 15 times. This has created a significant expansion of elementary education facilities, with a positive impact on school attendance among the eligible age group (Subrahmanian, 2007)

Poverty that spans generations is seen as both a characteristic and cause of chronic poverty of school facilities (Moore, 2001). Although priorities vary significantly from school to school, the majority of the schools have overcrowded classrooms and inadequate water and sanitary facilities and a huge deficit of furniture. The requirement for additional investment in primary school facilities is particularly acute in urban slums and the poorest areas in Kenya. In some of these areas primary school enrolment remains low and inadequate school facilities is one of the barriers to children's education influencing the education system (Ministry of Education, 2013)

The importance of KCPE is to: serve as a feedback to the education planners, Kenya National Examinations Council, teachers, pupils, parents and other stakeholders; planners can use it to modify, introduce or drop a topic or subject; screening/selection, for further studies, training; research work and certification (Ministry of Education, 2009). Primary education ushers pupils to secondary schools. The Kenya Certificate of Primary Education (KCPE) taken at the end of eight years of primary education is used to select those to join secondary school. The kind of secondary school one will join depends on the total marks obtained at KCPE. Those who score the highest go to the national schools, second best go to provincial schools and the third join the district schools. All these school best, followed by provincial and district schools. It has been noted that incidences of poverty fall and levels of private returns increase with increase in education level from primary to secondary (Republic of Kenya, 2005; UNESCO, 2005).

**Source:** The year 2012 KCPE examination report (Kenya National Examinations Council, 2013)

The pupils' performance in KCPE (Years 2008 to 2012) in Nairobi County and nationally is shown in Table 1

**Table 1: Pupils' Performance in KCPE (Years 2008 to 2012) in Nairobi County and Nationally**

Year	2008	2009	2010	2011	2012
Nairobi County's KCPE mean (%)	45.94	46.78	46.66	47.72	
National's KCPE mean (%)	51.23	53.84	54.12	41.31	53.02

**Source:** The year 2012 KCPE examination report (Kenya National Examinations Council, 2013)

The data in Table 1 indicates a lower mean grade in KCPE in Nairobi County compared to national in the same period. The decline in performance in schools is related to poor learning environment created by inadequacy of the schools facilities (Fabayo & Farombi, 1998). In Latin America, Africa and poor countries, the majority of the teachers not only lack adequate hardware and software, but also reliable internet access (World Bank, 2006). The adequacy of school facilities promote effective teaching and learning process (Mapaderun, 2002). Some schools have adequate laboratories, workshops, libraries, and other facilities or effective teaching and learning others have none, and where they exist they are poorly equipped. While some classes are held under trees and pupils are exposed to harsh weather conditions others are held in air conditioned classrooms (Asiabaka, 2008)

Former Assistant Minister of Education (Kenya), Dr. Kilemi Mweri, addressing a regional workshop for African teachers held on 24-28th September, 2007, Nairobi, on behalf of the Minister for Education, Professor George Saitoti declared that delivery of quality education was hampered by poorly trained teachers, lack of school facilities and lack of structured teacher development programmes which are also key in pupils' performance in KCPE (Ministry of Education, 2007)

The Kenya National Examinations Council used to analyze and publish KCPE results and had to rank and highlight the schools which had performed well (Abagi & Odipo, 1997). The quality of education in Kenya is examination oriented. The quality of education is seen in terms of pupils passing national examinations (Eshiwani, 1993). Therefore, there was the need for the study on the influence of school facilities on pupils' performance in KCPE in Nairobi County, Kenya

## **STATEMENT OF THE PROBLEM**

The increases in enrolment due to the success of Free Primary Education has put pressure on existing school facilities which has in many ways differed from lack of investment over a number of years with tangible influence at KCPE level. Although priorities vary significantly from school to school, the majority of the schools have overcrowded classrooms and inadequate water and sanitary facilities and a huge deficit of furniture. The requirement for additional investment in primary school facilities is particularly acute in urban slums and the poorest areas in Kenya. In some of these areas primary school enrolment remains low and inadequate school facilities is one of the barriers to children influencing the education system (Ministry of Education (Ministry of Education, 2013)

## **RESEARCH OBJECTIVES**

The research was guided by the following objectives

- To determine the extent to which headteachers provide school facilities that influence pupils' performance in KCPE
- To establish the extent to which school facilities influence pupils' performance in KCPE

## **RESEARCH METHODOLOGY**

Descriptive survey design was used because it allowed collection of descriptive data. The target population was 204 senior teachers in Nairobi County. Simple random sampling method was used to pick 3 districts from 9; 41 schools were picked from the selected districts by simple random sampling while 41 senior teachers and 41 accounts' clerks were

selected by census. The research instrument used were the senior teachers' questionnaire, interview and document guide. Validation of the instruments was done by the supervisors from the Department of Educational Administration and Planning of the University of Nairobi who reviewed the instrument for content validity. The reliability coefficient was determined by split-half technique and found to be 0.88 for the senior teachers' questionnaire and 1 for the interview and document guides. The accounts' clerks were interviewed in the study because they were the ones whom the headteachers delegated the responsibilities of the documentation of the school facilities

## RESEARCH FINDINGS AND DISCUSSIONS

### Research Question 1: To What Extent did Head Teachers provide School Facilities that Influenced Pupils' Performance in KCPE?

The accounts' clerks were asked to rate the extent to which the headteachers provided the school facilities that influenced pupils' performance in KCPE using the scale as: very adequate, adequate, or inadequate and the results are shown in Table 2

**Table 2: Accounts' Clerks' Responses on Extent of Head Teachers' Provision of School Facilities**

School Facilities	Fairly Adequate		Inadequate		Total	
	F	%	F	%	F	%
Exercise books	41	100			41	100
Buildings	41	100			41	100
Furniture	41	100			41	100
Textbooks			41	100	41	100
Radios			41	100	41	100
Equipment			41	100	41	100
Computers			41	100	41	100
Displays			41	100	41	100
Charts			41	100	41	100
Charts			41	100	41	100

N=41

### Buildings and Furniture

The results on Table 2 show that all the 41 schools had fairly adequate **buildings and furniture**. Buildings and furniture play a pivotal role in providing the physical and emotional comfort to the pupils and staff for an effective teaching and learning process. Some schools are over fifty years old and therefore, require modern facilities for teaching and learning process. Renovation of old and dilapidated buildings need to be carried out to ensure that facilities for teamers, planning areas, office space, clerical space, workrooms, professional development libraries, dining area, storage, space, pupils' conference areas, guidance services area for instruction for large group instruction, space for instructional media, library resource centre, science facilities, art and music studios, individual study area and physical education facilities are readily available (Asiabaka, 2008)

### Teaching and Learning Materials

The findings on Table 2 indicate that all the 41 schools had inadequate **textbooks**. Textbooks are a basic requirement of the Ministry of Education and are one of the common facilities in schools (Otiende, Ezaza & Boisvert, 1997). A study on the importance of textbooks in learning economics found that nothing has so far replaced written materials as the key element in education process as a consequence of which textbooks are necessary to learning at all

levels of schooling. Textbooks are critical in maintenance of the standards of quality and direction in the curriculum (Barbra, 1989). Therefore, inadequate textbooks may act as a hindrance to pupils' performance in KCPE

The data on Table 2 indicate that all the 41 schools had fairly adequate **exercise books**. Exercise books may be used by the pupils to do their school work, teachers to prepare schemes of work, lesson plans, lesson notes, record of work, record pupils' marks, write reports, minute book by BOM, and occurrence book for teachers on duty

The 41 schools had inadequate **radios**. Radios could be used for school broadcast programmes. Radio is an audio technology which can reach many pupils. Mass media such as radios reach a wider audience and would be quite effective (Otiende, Ezaza & Boisvert, 1997). Delivery of distance education depends on communication technology, namely: print correspondence, telephone, audio-conferencing and radio, audio-tapes, video and computer based technology (Willis, 2003). Inadequate radios may deny the pupils the school broadcast programmes hence influencing their performance in KCPE

The 41 schools had inadequate **equipment**; Equipment included those in science laboratory, geography and mathematics subjects used for teaching and learning process. The results on Table 2 show that all the 41 schools had inadequate **computers**. A compute is a tool in the world of ICT that promotes the teaching and learning process. The data on Table 2 indicates that all the 41 sampled schools had inadequate **displays**. Displays like specimens in a science laboratory enable pupils to see details of the environmental problems (Otiende, Ezaza & Boisvert, 1997). The 41 schools had inadequate **charts**. Charts may be used to draw diagrams and illustrations. Charts could give long lasting experience among pupils

### **Play Grounds**

The findings on Table 2 show that all the 41 schools had inadequate **play grounds**. Playgrounds could be used for games like football, physical education, parades, Prize Giving Day and pastoral meetings. Some may have been hired out for weddings, fund raisings and national elections. The grounds and sports create a happy atmosphere which will lower stress and buttress pupil morale in the face of severe academic pressure (Griffin, 1996). In the study on management of facilities in the United Kingdom, when games facilities are used they enable the less able children to stay on task and remain motivated for a longer period (Denyer, 1998)

### **Research Question 2: To What Extent did the School Facilities influence Pupils' Performance in KCPE?**

The senior teachers were asked to rate the extent to which school facilities influenced pupils' performance in KCPE using the scale as: very adequate, adequate, fairly adequate or inadequate and the results are shown in Table 3

**Table 3: Senior Teachers' Response on Rating on Influence of School Facilities**

<b>Level of Adequacy</b>	<b>F</b>	<b>%</b>	<b>KCPE Results Mean (%)</b>
Very adequate	4	10.0	58.8
Adequate	10	24.0	47.4
Fairly adequate	25	61.0	40.3
Inadequate	2	5.0	36.9

**N= 41**

The results on Table 3 indicate that the schools with very adequate facilities had the best mean grade in KCPE. Also, the mean grade in KCPE was better than the national grades. The adequacies of the school facilities promote

effective teaching and learning process in schools while their inadequacy affects the academic performance negatively (Mapaderun, 2002). The proper up-keep of any institution requires continuous maintenance. All members of the community have to understand that they are expected to be watchful over the fabric of buildings and report anything that seemed wrong (Griffin, 1996)

Some schools do not have adequate classrooms to accommodate the large number of pupils enrolled under the Free Primary Education programmes. For instance, classrooms appeared to be generally congested and there was hardly any space for free movement during lessons. Also, a number of classroom conditions were poor, for instance, lighting depended on the sunlight which is sometimes inadequate. Further, in some schools had introduced school mats for the children to sit on since there were no sufficient desks. But majority of the teachers felt that the sitting on the mat affected the children's writing skills and general physical development (Okwach & George, 1997)

## CONCLUSIONS

Considering the findings of the study it was established that all the 41 schools had fairly adequate exercise books, buildings and furniture. They had inadequate textbooks, radios, computers, equipment, displays, charts and playgrounds. The schools with very adequate school facilities had the highest mean grades in KCPE.. Therefore, the school facilities the headteachers managed influenced positively the pupils' performance in KCPE

## RECOMMENDATIONS

The following recommendations are put forward Ministry of Education should provide adequate funds for facilities such as textbooks, exercise books and chalks and any other needed for the learners' benefit

Kenya Education Management Institute should develop a curriculum on management of school facilities for in-service of headteacher

Directorate of Quality Assurance and Standards should carry out regular supervision of schools, in particular, to review the level of adequacy of school facilities to enhance pupils' academic achievement

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